ABSTRACT

A perovskite titanium-containing composite oxide particle has a composition represented by general formula (I), wherein the specific surface area is about $\frac{1}{2}$ 0 to about 200 m²/g, the specific surface area diameter D₁ of the primary particles as defined by formula (II) is about 10 to about 100 nm, and the ratio D_2/D_1 of the average particle size D_2 of the secondary particles to D_1 is about 1 to about 10:

 $M(TiO_3)$ --- (I)

(wherein M is at least one of Ca, Sr, Ba, Pb, or Mg) $D_1 = \ 6/\,\rho\,S \ --- \ (II)$

(wherein ρ is the density of the particles, and S is the specific surface area of the particles.)

The perovskite titanium-containing composite oxide particle of the present invention shows a small particle size and excellent dispersion properties, so that the particle is suitable for the application to functional materials such as a dielectric material and a piezoelectric material, a memory, and a photocatalyst.